

July
21

58. The multi-wheel-driving vehicle as set forth in claim 1, comprising:
a first drive train, wherein said first drive train is disposed at one lateral side of
the vehicle so as to drivingly connect an output shaft of the prime mover to a
transmission.

all

[Please add the following new claim 59:]

59. The multi-wheel-driving vehicle as set forth in claim 58, comprising:
a second drive train, wherein said second drive train is disposed laterally opposite
said first drive train so as to drivingly connect said three or more axles.

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-59 are pending in the
application, with 1, 11, 23, 32, and 45 being the independent claims. Claims 58 and 59
are new. These changes are believed to introduce no new matter, and their entry is
respectfully requested.

Based on the above amendment and the following remarks, Applicant
respectfully requests that the Examiner reconsider all outstanding objections and
rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 112

Claims 1-57 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner rejected claims 1 and 32 as unclear because the language "a pair of first and second . . . members" could be interpreted as meaning there are first and second members or a pair of first and second members totalling four members. The foregoing amendment removes "A pair of" from claims 1 and 32. Accordingly, claims 1 and 32 are clear and Applicant respectfully requests that the rejection be withdrawn.

The Examiner rejected dependent claims 6, 15, 18, 27, and 38 as unclear because each calls for "three axles in total" and the respective independent claims call for "three or more axles." Dependent claims may further limit their respective independent claims if the additional feature is taught by the disclosure. "Three axles in total" further limits "three or more axles" and is fully disclosed by the specification and figures. Accordingly, "three axles in total" is clear and Applicant respectfully requests that the rejection be withdrawn.

The Examiner rejected claim 15 because the language "the other two" is unclear. The foregoing amendment removes the phrase "the other two" from claim 15. Accordingly, claim 15 is clear and Applicant respectfully requests that the rejection be withdrawn.

The Examiner rejected claim 23 because the last three lines are unclear. The last three lines of claim 23 call for "each of said three or more axles synchronously interlocks with either of said output members so that each of said output members synchronously

interlocks with at least one of said axles." Figure 9 clearly depicts the features described in the last three lines of claim 23. The differential unit 23 has input member 82, which interlocks with axle 8 and both output members 86 and 87. Additionally, output member 86 interlocks with axle 25 and output member 87 interlocks with axle 11. Therefore, each of said three or more axles 8, 11, and 25, interlock with either of output members 86, and 87. Accordingly, claim 23 is clear and Applicant respectfully requests that the rejection be withdrawn.

The Examiner rejected claims 4, 34, and 47 because "frontmost" lacked antecedent basis. The foregoing amendment changes "said frontmost" to "a frontmost". Accordingly, "frontmost" no longer lacks antecedent basis and Applicant respectfully requests that the rejection be withdrawn.

The Examiner rejected claim 36 because "input means" lacked antecedent basis. The foregoing amendment changes "said input means" to "an input means". Therefore, "input means" no longer lacks antecedent basis. Additionally, the Examiner rejected claim 36 because the last two lines are unclear. The last two lines of claim 36 call for "said input means of said steering transaxle device synchronously interlocks with said second transmission member." Figure 1 clearly depicts the features of the last two lines of claim 36. Input means 14 of the steering transaxle device 10 synchronously interlocks via element 18 with the second transmission member 87. Accordingly, the last two lines of claim 36 are clear and Applicant respectfully requests that the Examiner withdraw the rejection.

Rejections under 35 U.S.C. § 102

Independent claims 1, 11, 23, 32, and 45 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,085,853 to Wernick. The Examiner states that the Wernick patent disclosed essentially all the features of the present invention. Amended claims 1, 11, 23, 32, and 45 now call for a prime mover, wherein the prime mover is disposed between two of said three or more axles, wherein said two axles are not the steering axle. The Wernick patent does not disclose this feature. Accordingly, Wernick does not teach every feature of the present invention and Applicant respectfully requests that the rejection be withdrawn. Additionally, the Wernick patent, as well as the other art of record, teaches the engine and engine gear box disposed under the cab of the vehicle. This arrangement is standard and well known in the art. Moving the engine from under the cab would require complete redesign of the vehicle disclosed by Wernick and therefore would not be obvious.

Claims 2-10, 12-22, 24-31, 33-44, and 46-59 depend from and add additional features to independent claims 1, 11, 23, 32, and 45 respectively. Accordingly, claims 2-10, 12-22, 24-31, 33-44, and 46-59 are allowable for at least the same reason as the independent claims.

Rejections under 35 U.S.C. § 103

Claims 7-10, 19-22, 28-31, 41-44, and 54-57 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Wernick in view of U.S. Patent No. 4,462,271 to Steig. Claims 39 and 52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Wernick in view of U.S. Patent No. 5,848,664 to Kasper.

Additionally, claims 40 and 53 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Wernick in view of Kasper and further in view of U.S. Patent No. 4,639,008 to Krettenauer.

Werner, as discussed above, does not teach each and every feature of the now-claimed invention. Additionally, the art of record in combination with Werner does not teach the limitations of the now-claimed invention. Therefore, even if it were obvious to combine the art of record, doing so would not result in the claimed invention. Accordingly, Applicants respectfully request that the rejections of claims 7-10, 19-22, 28-31, 39, 40-44, and 52-57 be withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Tracy-Gene G. Durkin
Attorney for Applicant
Registration No. 32,831

Date: July 22, 2002

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

Version with markings to show changes made

Marked-up version of claim 1:

1. A multi-wheel-driving vehicle, comprising:

three or more axles arranged in parallel along a longitudinal axis of said vehicle, each of said axles provided on both ends thereof with respective drive wheels, wherein one of said three or more axles is a steering axle provided with steerable drive wheels;

[a pair of] first and second transmission members, wherein said steering axle synchronously interlocks with said second transmission member, and wherein at least one of the other axles synchronously interlocks with said first transmission member;
[and]

power dividing means interposed between said first and second transmission members, wherein power is transmitted through said power dividing means between said first and second transmission members while said power dividing means permits a difference of rotary speed between said first and second transmission members; and

a prime mover disposed between two of said three or more axles, wherein neither of said two axles is the steering axle.

Marked-up version of claim 4:

4. The multi-wheel-driving vehicle as set forth in claim 1, wherein said steering axle is [the] a frontmost axle of said three or more axles.

Marked-up version of claim 11:

11. A multi-wheel-driving vehicle, comprising:

three or more axles arranged in parallel along a longitudinal axis of said vehicle, each of said axles provided on both ends thereof with respective drive wheels, wherein one of said three or more axles is a steering axle provided with steerable drive wheels; [and]

power dividing means including an input member and a pair of output members, said power dividing means differentially sharing power transmitted into said input member between said pair of output members, wherein each of said input member and said pair of output members synchronously interlocks with at least one of said three or more axles; and

a prime mover disposed between two of said three or more axles, wherein neither of said two axles is the steering axle.

Marked-up version of claim 15:

15. The multi-wheel-driving vehicle as set forth in claim 14, wherein said axles are three in total, and wherein the two axles other than said steering axle respectively synchronously interlock with [the other two of] said input member and said pair of output members.

Marked-up version of claim 23:

23. A multi-wheel-driving vehicle, comprising:

three or more axles arranged in parallel along a longitudinal axis of said vehicle, each of said axles provided on both ends thereof with respective drive wheels, wherein one of said three or more axles is a steering axle provided with steerable drive wheels; [and]

power dividing means including an input member and a pair of output members, said power dividing means differentially sharing power transmitted into said input member between said pair of output members, wherein each of said three or more axles synchronously interlocks with either of said output members so that each of said output members synchronously interlocks with at least one of said axles; and

a prime mover disposed between two of said three or more axles, wherein neither of said two axles is the steering axle.

Marked-up version of claim 32

32. A multi-wheel-driving vehicle, comprising:

a prime mover;

three or more transaxle devices disposed in tandem along a longitudinal axis of said vehicle, wherein each of said transaxle devices includes input means and an axle serving as output means, said axle being provided on both ends thereof with respective drive wheels, wherein one of said three or more transaxle devices is a main transaxle device whose input means receives power from said prime mover prior to the other transaxle devices, and wherein one of said three or more transaxle devices is a steering transaxle device whose axle is provided with steerable drive wheels;

[a pair of] first and second transmission members, wherein power of said prime mover is taken out from said main transaxle device to said first transmission member, and wherein said second transmission member synchronously interlocks with at least one of said input means of all the other transaxle devices other than said main transaxle device; [and]

power dividing means interposed between said pair of transmission members, wherein said power is transmitted through said power dividing means from said first

transmission member to said second transmission member while said power dividing means permits a difference of rotary speed between said first and second transmission members; and

wherein said prime mover is disposed between two of said three or more axles, and neither of said two axles is the steering axle.

Marked-up version of claim 34:

34. The multi-wheel-driving vehicle as set forth in claim 32, wherein said steering transaxle device is [the] a frontmost transaxle device of said three or more transaxle devices.

Marked-up version of claim 36:

36. The multi-wheel-driving vehicle as set forth in claim 32, wherein said steering transaxle device is other than said main transaxle device so that [said] an input means of said steering transaxle device synchronously interlocks with said second transmission member.

Marked-up version of claim 45:

45. A multi-wheel-driving vehicle, comprising:

a prime mover;

three or more transaxle devices disposed in tandem along a longitudinal axis of said vehicle, wherein each of said transaxle devices includes input means and an axle serving as output means, said axle being provided on both ends thereof with respective drive wheels, wherein one of said three or more transaxle devices is a main transaxle device whose input means receives power from said prime mover prior to the other

transaxle devices, and wherein one of said three or more transaxle devices is a steering transaxle device whose axle is provided with steerable drive wheels; [and]

power dividing means including an input member and a pair of output members, said power dividing means differentially sharing power transmitted into said input member between said pair of output members, wherein each of said input member and said pair of output members synchronously interlocks with at least one of said axle of said main transaxle device and said input means of the other transaxle devices other than said main transaxle device; and

wherein said prime mover is disposed between two of said three or more axles, neither of said two axles is the steering axle.

Marked-up version of claim 47:

47. The multi-wheel-driving vehicle as set forth in claim 45, wherein said steering transaxle device is [the] a frontmost transaxle device of said three or more transaxle devices.

Claims 58 and 59 are new.